1958-3 DIVISION ACTIVITIES VOLUME 84 NO. HY1
FEBRUARY 1958

PART 2

ACTIVITIES
UNIVERSITY OF HAWAI

## JOURNAL of the

# Hydraulics Division

PROCEEDINGS OF THE



AMERICAN SOCIETY

OF CIVIL ENGINEERS

TANK THE PERSON NAMED IN COLUMN TO T

# my by This you

Wednesday 18

Division

THE STREET, ST

## DIVISION ACTIVITIES HYDRAULICS DIVISION

Proceedings of the American Society of Civil Engineers

#### NEWS

February, 1958

### PURPOSE OF THE HYDRAULICS DIVISION (Quoted from the Official Register)

The advancement and dissemination of knowledge relating to the ocence of water in nature and its behavior in structures, water courses, underground.

n particular the field of the Hydraulics Division shall embrace meteorology hydrology as they affect the engineer, fluid mechanics in engineering usand applied hydraulics as a branch of engineering science which furnishabe basis for hydraulic design and for the practical use of water in the different specialized branches of hydraulic engineering."

#### MEETING OF THE EXECUTIVE COMMITTEE

two-day meeting of the Executive Committee, attended on the first day nairmen of the technical committees, the Chairman of the Committee on ications, and the Newsletter Editor, was held in Chicago on 28-29 October. Mr. Don P. Reynolds, Assistant to the Secretary, ASCE, was also ent.

#### Reorganization of Technical Committees

uring the past two years or so the Executive Committee has made a critinalysis of the committee structure of the Hydraulics Division in the light e objectives and purpose of the Division. At the October 1957 Committee ing certain changes in the committee structure were made final as necesfor the fulfillment of the Division's responsibilities to the Society. The proposed changes had been carefully considered by not only the bers of the Committee but also studied by the 1957 chairmen and the inneg 1958 chairmen of all the technical committees. The changes were ed to by the chairmen of all six technical committees, approved by the sion Executive Committee, and subsequently were approved by the ASCE mittee on Division Activities.

No. 1958-3 is part of the copyrighted Journal of the Hydraulics Division, Proedings of the American Society of Civil Engineers, Vol. 84, HY 1, February, 1958.

Specifically, the following changes were made:

a. A new administrative committee was created, to be named the "Committee on Research", its purpose defined as follows:

To initiate, organize, and coordinate programs of research in hydrology, hydromechanics, and applied hydraulics; to determine areas in which research is required; to promote interest in and financial support for research in cooperation with the Society Committee on Research.

b. The present Research Committee was redesignated as the "Committee on Hydromechanics". The duties of this Committee initially will be substant ally those previously carried on by the previous Committee on Research. T stated purpose of this Committee is revised as follows:

To promote the search for fundamental knowledge regarding the mechanics of fluids; to encourage the application of modern hydromechanics theory to the design, construction, and operation of hydraulic structures; to seek out and stimulate the publication of worthwhile contributions to the science.

c. The Committee on Floods was renamed as the "Committee on Flood Control." The stated purpose of this Committee was revised as follows:

To foster the compilation, analysis and publication of information regarding the occurrence of floods and their effects on human life and property; to investigate and report on methods of controlling floods and methods of preventing or alleviating damage due to floods.

d. The Committee on Design was renamed as the "Committee on Hydrau Structures." The stated purpose of this Committee is revised as follows:

To stimulate the accumulation and dissemination of information regarding design methods and performance characteristics of hydraulic structures; to foster the prompt utilization of research results in the development of improved design procedures.

#### Session Programs

The Committee on Session Programs this year will again consist of the Chairman of the Executive Committee, the Vice Chairman of the Executive Committee and the chairmen of the six technical committees. Mr. Harold Martin, as Chairman of this Committee, will continue to make all arrangements for the technical programs at the 1958 meetings and at the Atla Hydraulics Division Conference. Professor Carl Kindsvater, as Vice Chairman of this Committee, will undertake arrangements for all 1959 programs.

## Hydraulics Division Sessions At ASCE Conventions

a. Chicago, Illinois - 24-28 February 1958.

Committee
Flood Control
Hydrology

No. of Sessions
1

b.

Hydromechanics

1

	_				
Portland,	Oregon	-	23-27	June	1958.

Committee -	No. of Sessions
Flood Control (joint with Waterways &	
Harbors Division)	1
Hydraulic Structures	2
Hydromechanics	1
Sedimentation	1
Tidal Hydraulics	1

#### New York, New York - 13-17 October 1958.

Hew TOTK, Hew TOTK - 13-11 OC	oner 1900.
Committee	No. of Sessions
Hydraulic Structures	2
Hydrology	1 (tentative)
Hydromechanics	1

#### Hydraulics Division Conference

The 1958 conference at Atlanta, Georgia, will be sponsored jointly by the orgia Section and by the Georgia Institute of Technology. The technical gram will probably consist of six technical sessions, one sponsored by h of the six technical committees.

#### Establishment of Committee on Standards

A Committee on Standards was established, with stated purpose as follows:

To initiate actions related to the establishment or endorsement of standards in the field of interest of the Division, and to recommend personnel for appointment to standards committees operating jointly with other technical divisions or other agencies.

#### Committee Appointments and Terms

#### cutive Committee

The following revised terms were adopted:

Harold M. Martin, Chairman	1959
Carl E. Kindsvater, Vice Chairman	1960*
Wallace M. Lansford	1958
Arthur T. Ippen	1961*
Joseph B. Tiffany, Secretary	1958

ended one year.

These changes will bring the Executive Committee terms into line with the lety's present policy of having four Society-appointed members with four-r terms plus a secretary appointed by the Committee. A new member will appointed effective October 1958 for a four-year term expiring October 2.

#### ninistrative Committees

1958-34	HY 1	February, 19
James W. Ball, Chairman		1959
Harold M. Martin (Chairman Committee)	, Executive	1958
Joseph B. Tiffany (Secretary Committee)	, Executive	1958

3. Committee on the Karl Emil Hilgard Hydraulic Prize

2. Committee on the J. C. Stevens Award C. Walter Thomas, Chairman

The three members of this Committee are appointed for simultaneous two-year terms, with an entirely new Committee to be appointed every two years. This period corresponds with the two-year period for which the Hilgard Prize is offered once. Appointments for the next two years are as follows:

1958

1959

1960

Albert S. Fry, Chairman	1959
W. Douglas Baines	1959
George R. Schneider	1959

4. Committee on Research

David W. Appel

Tate Dalrymple

The members were selected to serve a one-year term. After one year new appointments will be made on staggered terms so that one member will retire each year and a new member appointed, with new members to serve five-year terms. The following were selected for the coming year:

Ralph D. Goodrich, Chairman	1958
James M. Robertson	1958
Maurice Dickinson	1958
Vito Vanoni	1958
Clarence F. Wicker	1958

5. Committee on Standards
Rolland W. Carter, Chairman

#### **Technical Committees**

Changes from and additions to the appointments given in the December 1957 Newsletter are as follows:

1. Committee on Hydraulic Structures
Rex A. Elder, most recent appointee to this committee, is filling the unexpired 1958 term of Mr. Mattern.

#### 2. Committee on Hydromechanics

Norman H. Brooks was selected as the new member of this committee for the term ending in 1962.

#### Next Meeting of the Executive Committee

The next meeting of the Executive Committee will be held in Atlanta in August 1958 just prior to the Hydraulics Division Conference.

#### TECHNICAL COMMITTEE NEWS

#### Flood Control Committee

The Committee on Flood Control met December 11 and 12, 1957, in Vicksburg, Mississippi, to plan its activities for the coming year. The principal meetings of the Committee were held at the Waterways Experiment Station to afford the members an opportunity of seeing experimental work in flood control and other hydraulic activities being conducted there.

One meeting was held in the offices of the Mississippi River Commission during which the Committee was briefed on the history of the Mississippi River Flood Control Project and on current studies and field operations in connection with flood protection measures on the Mississippi River.

Program plans for 1958 and 1959 were discussed and members of the Committee were assigned to sponsor sessions at the several conventions. After examining several fields in which special Task Force investigations related to lood control appeared desirable, it was decided to concentrate such efforts during the coming year on the subject of Flood Plain Zoning. Mr. H. A. Foster is Chairman of the Flood Control Committee.

#### Hydromechanics Committee

The Task Force on Friction Factors in Open Channels met November 23, 957 in Iowa City, Iowa. The first step in its work will be the preparation of report on the present state of the problem, including a critical review of the test papers on the subject. Several papers may be presented at some future asce Convention. Mr. Julian Hinds is Chairman of this Task Force.

#### HYDRAULICS TRANSLATIONS

The Hydromechanics Committee (formerly Committee on Research) has earned that there has been a good sale of "A List of Translations of Hyraulics Literature," ASCE Manual of Engineer Practice No. 35, 1957.

At their last meeting, the committee decided that there should be steps aken to publicize the existence of current translations. Recommendations were made to the Executive Committee that Mr. J. C. Van Tienhoven handle he collection of current information on hydraulics translations. It is anticiated the lists of new translations will be published occasionally in Civil Engineering.

Members of the Hydraulics Division who know of translations which have een prepared in the past two years are urged to report them. A form for reorting new hydraulics translations is printed on the back cover of this Newsetter. Send the form to Mr. J. C. Van Tienhoven, c/o U. S. Army Engineers Vaterways Experiment Station, Post Office Box 631, Vicksburg, Mississippi.

#### SIXTH INTERNATIONAL CONGRESS ON LARGE DAMS

The Sixth International Congress on Large Dams will be held during eptember 1958 in New York City. The Congress proper will take place from uesday, September 16 to Friday, September 19, 1958, inclusive. The following technical questions will be discussed at the Sixth Congress.

#### Question 20:

"Heightening of existing dams including methods of constructing new dams in successive stages."

#### Question 21:

"Observation of stresses and deformations in dams and in foundations and abutments; and a comparison of these observations with computations and tests on small scale models."

#### Question 22:

"Compaction methods and moisture content for materials used in the construction of earth core and supporting fill for earth and rockfill dams."

#### Question 23:

"Use of admixtures and pozzolanic materials in concrete for dams and the influence of the finer sand particles."

The study tours following the congress will leave New York City either by railroad or airplane on Saturday, September 20, and they will terminate on Saturday, September 27. The following three alternate study tours have been arranged:

#### Study Tour No. 1:

The Southeastern Study Tour. This study tour will include TVA, ALCOA, and other dams and the U. S. Army Engineer Waterways Experiment Station.

#### Study Tour No. 2:

The Midwestern Study Tour. This study tour will include Corps of Engineer dams along the Missouri River, USBR Dams of the Colorado-Big Thompson project, and the USBR engineering headquarters in Denver.

#### Study Tour No. 3:

The Northwestern Study Tour. This tour will include Corps of Engineer, USBR and other dams along the Columbia and Willamette Rivers.

Prior to the Sixth Congress a sectional meeting of the World Power Conference will take place in Montreal, Canada from Sunday, September 7, to Thursday, September 11, 1958. A joint study tour sponsored by the Canadian National Committee of the World Power Conference and the United States Committee on Large Dams will follow the meeting. This tour will include visits to the St. Lawrence River Power and Seaway Project near Cornwall, Canada; to Niagara Falls; and to the Shippingport Nuclear Energy Plant near Pittsburgh.

#### FREE

FREE

FRE

Society Publications of Interest to Hydraulic Division Members

- Directory. Complete membership lists, arranged alphabetically and geographically. Issued every year. Free on individual request from Society headquarters.
- 2. Directory Supplement. List of technical division members. (First edition,

June 1955, not now available.) Free on request from headquarters.

- 3. Official Register. General information regarding organization, officers, committee personnel, constitution and bylaws, rules of policy and procedure, annual report, local sections, student chapters, medals, and prizes. Issued annually and mailed without request to every member.
- 4. Technical Division Handbook. Rules of procedure for all technical divisions. Free on request from headquarters.
- Technical Publications Handbook. Requirements for manuscripts and instructions for handling papers for Proceedings Journals. Free on reques from headquarters.
- 6. Instructions for Convention Speakers and Authors. (Hydraulics Division). Free on request from Division Secretary.
- 7. A Session Planning Handbook. Suggestions for Arranging Programs and Conducting Sessions for Meetings, ASCE 1956. Free on request from headquarters.
- "So You're Going to Present a Paper." Free on request from headquarters.
- "Guide for Development of Proceedings Separates, 1951." (Preparation, Reviewing, Acceptance and Editing of Papers.) Board of Direction, Committee on Publications. Free on request from headquarters.
- Publication Procedure for Technical Papers. Proceeding Separate No. 290, Oct. 1953, Board of Direction, Committee on Publications. Free on request from headquarters.
- 11. Hydraulics Division Committee Member Handbook, 1957. Free on request from headquarters.
- 12. "Notes on Use of Slides", J. B. Tiffany, June 25, 1954. Free on request from Division Secretary.
- 13. "Civil Engineering Annual Index" (years 1943 through 1946 out of print) (beginning Vol. 17, year 1947) (year 1950 out of print). Free on request from headquarters.

#### FOR YOUR CALENDAR

#### ASCE Meetings

nounced)

February 24-28, 1958 June 23-27, 1958 August 20-22, 1958

October 13-17, 1958 February 19-23, 1959 May 4-8, 1959 June or July 1959

October 19-23, 1959

ASCE, Chicago Convention ASCE, Portland, Oregon, Convention Hydraulics Division, Atlanta Conference ASCE, New York Convention

ASCE, Los Angeles Convention ASCE, Cleveland Convention

Hydraulics Division (location to be an-

ASCE, Washington, D. C., Convention

August or September 1959

#### Non-ASCE Meetings

April 20-25, 1958	American Water Works Association,
	Dallas, Texas
June 11-14, 1958	Third U. S. National Congress of Ap-
	plied Mechanics, Brown University,
	Providence, R. I.
June 16-18, 1958	Seventh Hydraulics Conference, Iowa
	Institute of Hydraulic Research, Iowa
	City, Iowa
September 15-20, 1958	Sixth International Congress on Large

Research, Montreal, Canada

Deadline dates for Newsletter contributions: April issue—February 15;
June issue—April 15.

Newsletter Editor:

Dams, New York

E. B. Pickett P. O. Box 631 Vicksburg, Mississippi

International Association for Hydraulic

## HYDROMECHANICS COMMITTEE HYDRAULICS DIVISION AMERICAN SOCIETY OF CIVIL ENGINEERS

#### TRANSLATION OF HYDRAULICS LITERATURE

nor				
e (Translation)				
		-		
(Original Language)				
ginal Publication:				
Periodical				
Volume Iss	sue	Pages	Date	e
Other (Book or Report)				
Pages				
nslated by				
Organization				
eries (e.g. T.M. No.)				
arks (Availability, etc.)				
ee	Rep	orted by		
		~		

se report to Mr. J. C. Van Tienhoven, c/o U. S. Army Engineer Waters Experiment Station, P. O. Box 631, Vicksburg, Mississippi.

FILED IN STACKS